

**ABSTRACT OF THE DISCLOSURE**

A controller controls selection of rows of photosensors residing in a photosensor array having at least one row of photosensors with a first sensor size, and at least one row of photosensors with a second sensor size. In a first example  
5 embodiment, the controller may select each sensor in a double row of sensors for white light having a smaller area than the sensors in other rows. For the first embodiment, the native input sampling rate for luminance is greater than the native input sampling rate for color information. In a second example embodiment, for every band of wavelengths being sensed, the controller selects one of two rows of  
10 sensors, with one row having relatively small sensor areas and the other row having relatively large sensor areas. In the second example embodiment, the rows with relatively small sensor areas are used for high native input sampling rates, and the rows with relatively large sensor areas are used for high color accuracy.

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